

PFAS national testing strategy – high level overview

Background

Perfluoro and polyfluoroalkyl substances (PFAS) are a diverse group of chemicals with chains of carbons bonded to many fluorine atoms. These carbon-fluorine bonds provide unique water and grease repellent properties, making them attractive for products like firefighting foams, and coatings for cookware and fabrics. However, these substances are also very persistent in the environment, transport easily in water and soil, and some have been shown to be toxic to humans and bioaccumulate in fish. Concerns were first raised over a few specific, long-chain PFAS chemicals, so that the manufacturers of these substances began to phase out production or substitute shorter chain versions (including a product called GenX), anticipating these would be of less concern. Subsequent monitoring for PFAS chemicals in the environment, drinking water, and in human and animal tissues has indicated that the longer chain molecules continue to be a concern, as are the shorter chain molecules.

One hot spot of PFAS contamination is in North Carolina, where a manufacturing facility along the Cape Fear river released PFAS wastewater to the river. As a result, GenX and other PFAS have been detected in that area in several environmental media (river water, sediment, soil, air), drinking water, human samples (blood), as well as produce grown in the area near the manufacturing facility. In 2020, a petition by several concerned parties in North Carolina was submitted to the U.S. EPA to require the responsible industry to pay for toxicity testing and monitoring of 14 PFAS measured in media indicating direct human exposure (drinking water, food or human samples) as well as an addition 40 PFAS with suspected exposure concerns based on presence in the environment.

After careful review, EPA denied the Cape Fear petition primarily because the petitioners were unaware of several ongoing PFAS efforts and the petition did not meet the legal requirements of providing a factual basis for their proposed scope. Further, the Cape Fear contamination is one site of concern, but other sites exist and PFAS contamination is a broader issue of national concern. Consequently, EPA is developing a PFAS Testing Strategy that will provide wider utility and inform the potential risk of PFAS beyond the 54 petition chemicals.

What action is EPA taking?

Ex. 5 Deliberative Process (DP)

PFAS definition and categorization

Ex. 5 Deliberative Process (DP)

Tiered testing approach – Rusty, Grace, etc

Ex. 5 Deliberative Process (DP)

Additional testing efforts in ORD

Data gathering

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Data gap analysis

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Questions/ other

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)